

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>CXRY/P28838PC</b>	<b>FOR FURTHER ACTION</b> see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. <b>PCT/GB 03/03789</b>	International filing date (day/month/year) <b>29/08/2003</b>	(Earliest) Priority Date (day/month/year) <b>29/08/2002</b>
Applicant  <b>CXR BIOSCIENCES LIMITED (SC 211745)</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 8 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

## 1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☒ **Certain claims were found unsearchable** (See Box I).

3. ☒ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☐ the text is approved as submitted by the applicant.

☒ the text has been established by this Authority to read as follows:

**PERFLUORINATED FATTY ACIDS FOR THE TREATMENT OF OBESITY, DIABETES,  
HYPERLIPIDAEMIA, CANCER AND INFLAMMATION**

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☒ None of the figures.

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/GB 03/03789

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2. ☒ Claims Nos.: 4-8, 17-25, 28; 1,9 (in part)  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful international Search can be carried out, specifically:  
see FURTHER INFORMATION sheet PCT/ISA/210
  
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
  
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
  
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
  
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:  
1,3,9-11,13-16 (all in part)

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box 1.2

Claims Nos.: 4-8, 17-25, 28; 1,9 (in part)

The term "modulation" as defined in claims 1 and 9 is not clear. The search has performed for diseases as defined in claim 3.

Method claims 4-8 are not acceptable under Art. 6 PCT. The therapeutic application is functionally defined by a mechanism of action which does not allow any practical application in the form of a defined, real treatment of a pathological condition.

The description even does not contain any indication what kind of disease falls under the definition "modulation of PPAR".

Screening methods defined in claims 17-21 and dependent claims 22,23 are not clear according to Article 6 PCT. The claims do not contain any technical features, e.g. the method does even not comprise administration or addition of drug to be identified.

Claim 24 and 25 are not supported by the description according to Article 6 PCT.

Claim 28 is not clear at all.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1, 3, 9-11, 13-16 (all in part)

Use of compounds as defined in claim 1 for modulating body mass  
---

2. claims: 1, 3, 9-11, 13-16 (all in part)

Use of compounds as defined in claim 1 for modulating plasma insulin and plasma glucose levels  
---

3. claims: 1-3, 5, 9-16 (all in part)

Use of compounds as defined in claim 1 for modulating plasma triglyceride and plasma cholesterol levels  
---

4. claims: 2, 12-16 (all in part)

Use of compounds as defined in claim 1 as antitumor agent  
---

5. claims: 2, 3, 12-16 (all in part)

Use of compounds as defined in claim 1 as antiinflammatory agent  
---

6. claims: 3, 11 (all in part)

Use of compounds as defined in claim 1 for treating atherosclerosis  
---

7. claims: 3, 11 (all in part)

Use of compounds as defined in claim 1 to treat coronary heart disease and stroke  
---

8. claims: 3, 11 (all in part)

Use of compounds as defined in claim 1 to treat apnoea  
---

9. claims: 3, 11 (all in part)

Use of compounds as defined in claim 1 to treat arthritis  
---

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

10. claims: 3, 11 (all in part)

Use of compounds as defined in claim 1 to treat reduced  
fertility

---

11. claim: 26

Kit comprising compounds as defined in claim 1 and a PPAR  
polypeptide

---

12. claim: 27

Kit comprising compounds as defined in claim 1 and a lipid  
metabolising or binding entity

---

## INTERNATIONAL SEARCH REPORT

International Application No

PCT 03/03789

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61K31/19 A61K31/20 A61P3/06 A61P3/10 A61P19/02  
 A61P29/00 A61P35/00 A61K49/00 G01N33/50

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61K G01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, BIOSIS, CHEM ABS Data, MEDLINE, EMBASE

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>XIE YI ET AL: "Characterization of the adipose tissue atrophy induced by peroxisome proliferators in mice" LIPIDS, vol. 37, no. 2, February 2002 (2002-02), pages 139-146, XP009025416 ISSN: 0024-4201 abstract page 141, column 2, paragraph 1 - paragraph 3 page 143, column 2; table 4 page 144, column 2, paragraphs 1,3</p> <p>-----          -/--</p>	<p>1,3,          9-11,          13-16</p>

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&amp;" document member of the same patent family

Date of the actual completion of the international search

12 February 2004

Date of mailing of the international search report

19.05.2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
 NL - 2280 HV Rijswijk  
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
 Fax: (+31-70) 340-3016

Authorized officer

Büttner, U

## INTERNATIONAL SEARCH REPORT

International Application No

PCT 03/03789

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	VAN RAFELGHEM M J ET AL: "Interrelationships between energy and fat metabolism and hypophagia in rats treated with perfluorodecanoic acid." TOXICOLOGY LETTERS. NETHERLANDS JAN 1988, vol. 40, no. 1, January 1988 (1988-01), pages 57-69, XP009025414 ISSN: 0378-4274 abstract page 61 page 66	1,3, 9-11, 13-16
X	----- DAVIS II J W ET AL: "Effects of perfluorodecanoic acid on de novo fatty acid and cholesterol synthesis in the rat" LIPIDS 1991 UNITED STATES, vol. 26, no. 10, 1991, pages 857-859, XP009025430 ISSN: 0024-4201 page 858	1,3, 9-11, 13-16
P,X	----- WO 02/066028 A (CXR BIOSCIENCES LTD ;WOLF CHARLES ROLAND (GB); ELCOMBE CLIFFORD RO) 29 August 2002 (2002-08-29) * whole document *claims 1-3,9-12,15 -----	1-28

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/03/03789

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
WO 02066028	A	29-08-2002	CA	2438085 A1		29-08-2002
			EP	1359906 A2		12-11-2003
			WO	02066028 A2		29-08-2002
			GB	2383535 A		02-07-2003
-----						